

October 4 - October 10, 2001

The Terra spacecraft is in nominal mode. All instruments are in nominal science mode. Instrument operations are continuing smoothly on all five instruments. Support of Terra-related field campaigns is ongoing.

A second meeting was held on Tuesday, October 9, to discuss the S-band Transponder (SBT) issues. The spacecraft development contractor and the transponder vendor attended the telecon. The history of telemetry spikes is being examined to understand their cause and relationship to the event in which the transponder did not turn on properly during one scheduled Tracking and Data Relay Satellite System (TDRSS) contact on September 19. It is believed that an autonomous flight software refresh occurring on the transponder in combination with the turn-on command may have resulted in the anomaly. If two commands are executed during a refresh, the first command will not execute.

Several MDA2BITE trips (High Gain Antenna Motor Drive Assembly opto-coupler Single Event Upsets) occurred during this reporting period with no resultant non-recoverable data loss. A number of TDRSS Spare contacts were pulled from Terra on short notice during this reporting period, resulting in the need for rescheduling in order to acquire the data. Contacts that are rescheduled require blind acquisitions, and one blind acquisition was concurrent with an MDA2BITE trip. Data loss occurred during this contact.

Plans

Next Drag make-up Maneuver on October 23

Next MODIS Calibration Roll Maneuver on November 5

Continued testing with commercial Polar Ground Stations

Testing of Direct Downlink (DDL) capability over Norway Ground Station to acquire data for ASTER team

